

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. **(Canceled).**
2. **(Currently Amended)** The GaN-based semiconductor light emitting diode as set forth in ~~claim 7~~claim 11,
wherein the alloy layer is made of one hydrogen-storing alloy selected from the group consisting of Mn-based hydrogen-storing alloys, La-based hydrogen-storing alloys, Ni-based hydrogen-storing alloys and Mg-based hydrogen-storing alloys.
3. **(Original)** The GaN-based semiconductor light emitting diode as set forth in claim 2, wherein the Mn-based hydrogen-storing alloy is MnNiFe or MnNi.
4. **(Original)** The GaN-based semiconductor light emitting diode as set forth in claim 2, wherein the La-based hydrogen-storing alloy is LaNi₅.
5. **(Original)** The GaN-based semiconductor light emitting diode as set forth in claim 2, wherein the Ni-based hydrogen-storing alloy is ZnNi or MgNi.
6. **(Original)** The GaN-based semiconductor light emitting diode as set forth in claim 2,

wherein the Mg-based hydrogen-storing alloy is ZnMg.

7-10. (Canceled).

11. (Currently Amended) ~~The GaN-based~~ A GaN-based semiconductor light emitting diode as set forth in claim 7, further comprising:

a substrate on which a GaN-based semiconductor material is grown;

a lower clad layer formed on the substrate, and made of a first conductive GaN semiconductor material;

an active layer formed on a designated portion of the lower clad layer, and made of an undoped GaN semiconductor material;

an upper clad layer formed on the active layer, and made of a second conductive GaN semiconductor material;

an alloy layer formed on the upper clad layer, and made of a hydrogen-storing alloy; and

a second-metal layer formed on the alloy layer, and made of one metal selected from the group consisting of Rh, Al and Ag.

12. (Original) The GaN-based semiconductor light emitting diode as set forth in claim 11, wherein the second metal layer has a thickness of 500Å to 10,000Å.

13. (Withdrawn) A method for manufacturing a GaN-based semiconductor light emitting diode comprising the steps of:

(a) preparing a substrate on which a GaN-based semiconductor material is grown;

(b) forming a lower clad layer, made of a first conductive GaN semiconductor material, on the substrate;

(c) forming an active layer, made of an undoped GaN semiconductor material, on the lower clad layer;

- (d) forming an upper clad layer, made of a second conductive GaN semiconductor material, on the active layer;
- (e) removing designated portions of the upper clad layer and the active layer so as to expose a portion of the lower clad layer; and
- (f) forming an alloy layer made of a hydrogen-storing alloy on the upper clad layer.

14-36. **(Canceled).**

37. **(Currently Amended)** The GaN-based semiconductor light emitting diode as set forth in ~~claim 7~~claim 11, wherein the alloy layer is made of one hydrogen-storing alloy selected from the group consisting of ZnNi and ZnMg.

38. **(Currently Amended)** The GaN-based semiconductor light emitting diode as set forth in ~~claim 7~~claim 11, further comprising:

~~a metal layer on an upper surface of the alloy layer; and~~

an electrode layer on an upper surface of the metal layer;

wherein said electrode layer occupies only a middle region of the upper surface of said metal layer without covering a peripheral region of the upper surface of said metal layer, said peripheral region surrounding said middle region.

39. **(Canceled).**

40. **(Currently Amended)** The GaN-based semiconductor light emitting diode as set forth in ~~claim 7~~claim 11, wherein the hydrogen-storing alloy is MnNiFe.

41. **(Currently Amended)** The GaN-based semiconductor light emitting diode as set forth in ~~claim 7~~claim 11, wherein the hydrogen-storing alloy is ZnNi.